

(19) World Intellectual Property
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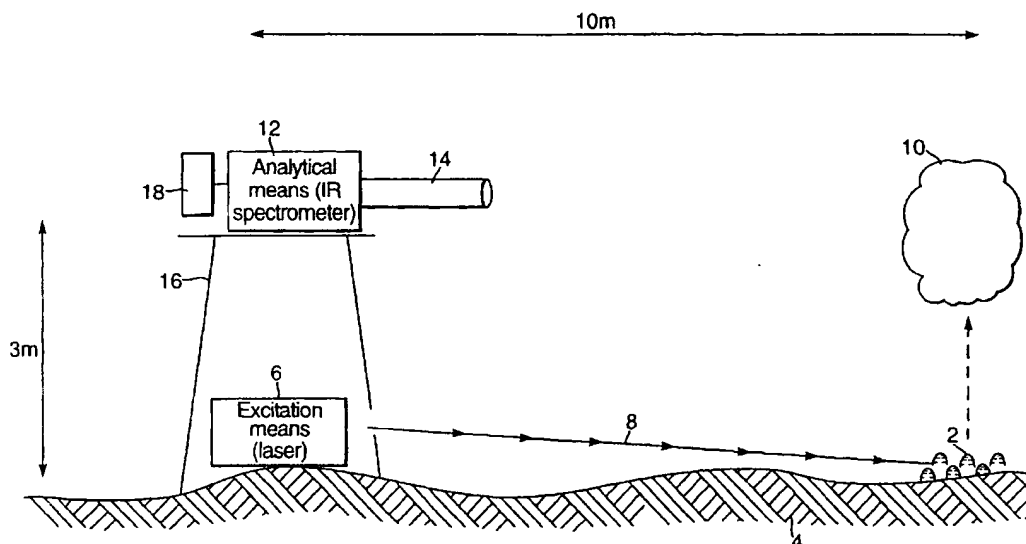
(43) International Publication Date
4 March 2004 (04.03.2004)

PCT

(10) International Publication Number
WO 2004/019020 A1

- (51) International Patent Classification⁷: **G01N 21/71**, 21/35
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- (21) International Application Number: **PCT/GB2003/003440**
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 6 August 2003 (06.08.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 0219541.0 22 August 2002 (22.08.2002) GB
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
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- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHOD AND APPARATUS FOR STAND-OFF CHEMICAL DETECTION



(57) **Abstract:** A method, suitable for stand off analysis of a sample (2), comprising: (i) using an excitation means (6) to vaporise the sample (2) thereby producing a vapour plume (10) of molecular species; and (ii) using an analytical means (12) to analyse the molecular species within the vapour plume (10) wherein the analytical means (12) analyses the molecular emission spectra of the vapour plume (10). The invention also relates to a kit and an apparatus for use with the same.